State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

February 25, 1993

Alan Altur HSM - 5J
U.S. Environmental Protection Agency
77 W. Jackson
Chicago, IL 60604

Dear Mr. Altur:

Please find enclosed a copy of the site inspection work plan for Sterling Steel Foundry, Sauget, Illinois, St. Clair County ILD# 006286520 prepared in accordance with the guidance set forth in the U.S. EPA sponsored training courses, and designed to address all aspects of the proposed screening site inspection.

Should you have any questions or comments concerning the enclosed documents, please feel free to call Lynnette Koutnik at (217)782-6760.

Sincerely,

for Thomas Crause
Pre-Remedial Program Manager
Site Assessment Unit
Remedial Project Management Section
Bureau of Land

SITE INSPECTION WORK PLAN

FOR:

Sterling Steel Foundry

PREPARED BY

PRE-REMEDIAL SITE ASSESSMENT UNIT BUREAU OF
LAND/REMEDIAL PROJECT MANAGEMENT SECTION
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
2200 CHURCHILL ROAD
SPRINGFIELD, ILLINOIS 62794-9276

****

Alan Altur
Sampling
36.00
3/17/93

CONTENTS

-5624-
WSW C.

I. SITE INFORMATION

I. GENERAL

Site Name: Sterling Steel Foundry ILD# 006286520

Site Location: 2300 Falling Springs Road LPC# 1631215017

Sauget, Illinois 62206 Work plan prepared by:

St. Clair County Lynnette A. Koutnik

Estimated inspection date: MARCH 17-18,1993 Work plan approved by:

Alan Altin

3/17/93

****

II. THE ASSIGNMENT (briefly describe the objectives of the inspection and how they are going to be accomplished).

The purpose of a Screening Site Inspection is to document site contamination and identify the potential migration pathways contaminants may be transported. Soil/sediment samples will be collected during the SSI to be used to evaluate what kind of impact past and current conditions are having on the environment and the surrounding population.

****

III. SITE DESCRIPTION (briefly describe the site, including location, unique geological features, source(s) of contamination, methods of disposal and current status of activities).

Sterling Steel Foundry (also known as peripheral site J of the Dead Creek Project, DCP) is located in the Village of Sauget and is bordered on the north by the Alton and Southern Railroad; on the west by Monsanto Road; on the south by Little Avenue, and on the east by a Mobil Oil Tank Farm. The surrounding area includes a residential area to the south, the Mississippi River about 1 1/4 miles to the west, with the remaining area being heavily

industrialized. According to Ecology & Environment, the areas of concern are two main pits and a surface disposal area that is defined by a triangular portion of the property approximately 5-6 acres in size to the northeast of the plant. Although a documented inventory of the waste types disposed of in pits is not available, the site operator claims the pit, approximately 25 feet deep, located southeast of the plant building received scrap metal, demolition debris, and casting sand. There is no evidence found suggesting disposal of hazardous materials in this pit. During a recent visit, another pit located south west of a small, inactive incinerator was observed. The unlined pit located north of the plant building, received baghouse dust from furnace operations in the foundry. The surface drainage in this area appears to be directed towards a ditch along the northern perimeter. However, there is evidence of several small scattered depressions in the area. Sterling Steel Foundry is currently active and the only observed changes since the 1988 Preliminary Assessment are the removal of an aeration pond and the presence of a third pit receiving runoff. The geology in the area consisits of unconsolidated alluvium and glacial outwash material. This section is underlain by Mississippian age bedrock and older alluvium and the MacKinaw Member of the Henry Formation. These two formations are hydraulically interconnected with a composite thickness ranging from 70 to 120 feet thick.

****

IV. SITE HISTORY (briefly describe the history of the site including previous owners, reported injuries, complaints, govt. action).

The Sterling Steel Foundry was initially operated by R.O. Shive and Claude

Harrell during 1922. In 1982, St. Louis Steel Company purchased the facility, and the name was changed from Sterling Steel Casting Company to its present name. The pit located southeast of the plant building was excavated approximately 30 years ago, based on a review of historical aerial photographs. The other unlined pit, located north of the plant building, was excavated in approximately 1950. A small incinerator is situated immediately west of the former borrow pit and has a stack approximately 15-18 feet in height, and was used solely to burn trash and empty bentonite sacks, according to the plant operator, and was operational for 10-12 years following its installation in 1970. Sometime in the mid-1970's, Sterling Steel began to use the surface disposal area northeast of plant buildings for disposal of spent casting sand, slag, scrap steel, and construction debris. In 1988, Ecology and Environment (E & E) completed an investigation of the DCP which included this site. A soil gas survey found evidence of volatile organic gases; surface soil samples revealed elevated levels of nickel and chromium; subsurface soil samples revealed the presence of organic contaminants - ethylbenzene, xylene, 1,4-dichlorobenzene, dibenzofuran, phenanthrene, and Aroclor 1260; and geophysical surveys detected small anomalies probably resulting from buried slag or interference from steel castings and scrap metals which were found at the surface throughout the survey. In 1988, a CERCLIS Preliminary Assessment of this site was performed. No prior government investigations are known of at this time.

****

II. SAFETY CONSIDERATIONS

I. PHYSICAL HAZARDS AT SITE (briefly describe any physical hazards that the inspection team may encounter at the site).

There is a concern for sampling on site and in the nearby area. Due to the presence of three deep pits on site and several scattered depressions, personnel will use extreme caution when approaching these areas for sampling. Weather factors, such as cold or thunderstorms, are a possibility, thus precautions should be taken to prevent problems.

****

II. CHEMICAL HAZARDS AT SITE (briefly identify those chemicals that are known or are suspected to be present, include their state and physical characteristics).

Analytical results from Ecology & Environment's previous study are as follows: a soil gas survey found evidence of volatile organic gases; surface soil samples revealed elevated levels of nickel and chromium; subsurface soil samples revealed the presence of organic contaminants - ethylbenzene, xylene, 1,4-dichlorobenzene, dibenzofuran, phenanthrene, and Aroclor 1260.

****

III. DERMAL AND RESPIRATORY PROTECTION (identify the level of personal protection that will be used, including anticipated modifications).

Level D protection will be used at all times, with continuous air monitoring during the sample collection. If an increase occurs, the following will be implemented:

0-5 units over background Level C

5-50 units over background Level B

50-500 units over background Level A

****

IV. EMERGENCY INFORMATION

Nearest Hospital: Centreville Township Hospital Phone: (618)332-3060

Hospital Location: 5900 Bond Avenue For Emergency: 911

Centreville, Illinois

Ambulance Service: Bruns Ambulance Service Emergency Phone: 911

Fire Service: Sauget Fire Department Emergency Phone: (618)332-6600

Non-Emergency Phone: (618)332-6700

Police: Sauget Police Department Emergency Phone: 911

Non-Emergency Phone: (618)332-6500

****

III. FIELD ACTIVITIES

I. TEAM ASSIGNMENTS

NAME	RESPONSIBILITY
LYNNETTE KOUTNIK	Project Manager
KEN CORKILL	Safety Officer/Sampler
SHEILA MURPHY	Chain of Custody
GREG SPENCER	Sampler

II. FIELD WORK PROPOSED
(check all that apply)

	Activity	Procedures
X	Ambient Air Sampling (OVA,HNU,etc.)	IEPA Methods Manual pp.19-23
___	Groundwater Sampling	IEPA Methods Manual pp.1-5
___	Surface Water Sampling	IEPA Methods Manual pp.6-10
X	Soil/Sediment Sampling	IEPA Methods Manual pp.13-18
___	Tap Water Sampling	IEPA Methods Manual pp.11-12
___	Slope Determinations	IEPA Methods Manual pp.24-25

___	Water Level Measurements	IEPA Methods Manual p.31
_X_	Perimeter Survey	IEPA Methods Manual p.33
_X_	Site Inspection	IEPA Methods Manual pp.34-39
_X_	Soil Borings/Well Installation	IEPA Methods Manual pp.26-30
___	Public Interviews	IEPA Methods Manual p.40
___	Groundwater Flow Determination	IEPA Methods Manual p.32
_X_	Decontamination Procedures	IEPA Methods Manual pp.41-56
___	Others:	_____

****

IV. SAMPLING

I. PROCEDURES (briefly describe the procedures the inspection team will employ in their collection of environmental samples).

All samples will be collected in accordance with the Illinois Environmental Protection Agency's Site Inspection QAPP. Sediment/soil samples will be collected with stainless steel spoons, trowels or augers and put directly into sampling jars.

****

II. LOCATION OF SAMPLES (identify the number of samples, their type and their location. The attached map should identify these locations).

Sample #	Type	Location
X101 - X110	Soil	see attached map
X201 - X207	Sediment	see attached map

****

III. ANALYTICAL SERVICES (Identify the laboratory that will perform the analysis of the samples taken at the site, include requested analysis)

The target compound list will be run on all samples. The organic

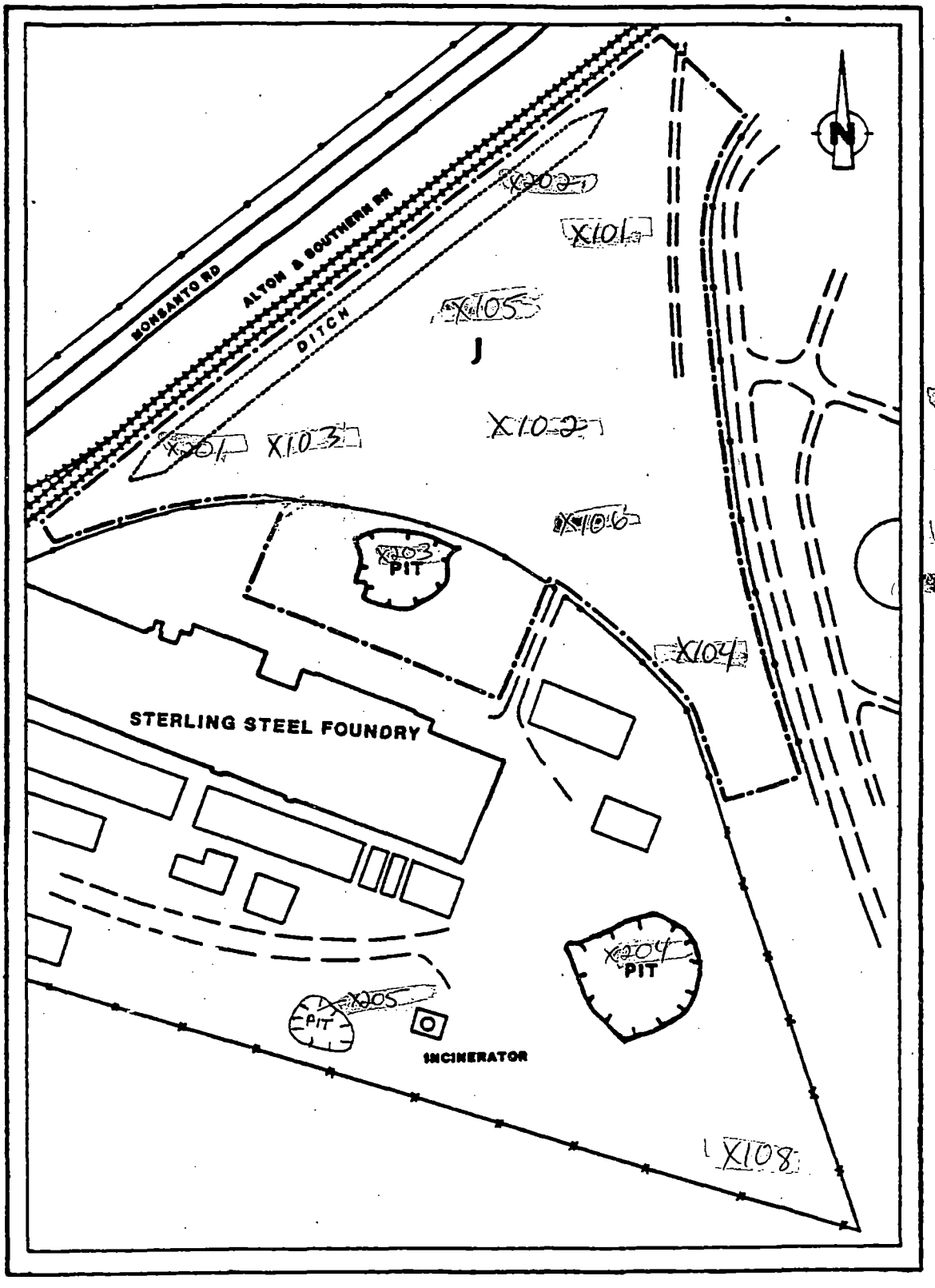
samples will be analyzed by the IEPA's Springfield lab and all the inorganics will be analyzed by IEPA's Champaign lab.

ATTACHMENT I

RECORDS AND DOCUMENTATION (Check the records or documents that will be generated during this project)

- X Work Plan
- X Safety Plan
- X Sampling Plan
- X Equipment Checklist
- X Log Book
- X Chain of Custody Records
- X Sample Analysis Records
- X Photographs
- X Drilling Logs
- X Correspondence
- _____ Personal Interview Tapes or Transcripts
- X Maps
- _____ Instrument Calibration Records
- _____ Procurement Documents
- X Site Inspection Form (2070-13)
- X HRS Scoring Package
- _____ Other (specify)

X206



Sediment

Surface soil

Subsoil using Hand auger

Subsoil (using hand auger

SCALE

0 100 500 FEET

DEAD CREEK SITE AREA J

BACKGROUND

X109

X206

to be taken in field
1/2 mi. South of Site

DUPLICATE

X110

X207

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

March 12, 1993

Alan Altur HSM - 5J
U.S. Environmental Protection Agency
77 W. Jackson
Chicago, IL 60604

Dear Mr. Altur:

Please find enclosed a **revised** copy of the site inspection work plan for Sterling Steel Foundry, Sauget, Illinois, St. Clair County ILD# 006286520 prepared in accordance with the guidance set forth in the U.S. EPA sponsored training courses, and designed to address all aspects of the proposed screening site inspection.

Should you have any questions or comments concerning the enclosed documents, please feel free to call me at (217)782-6760.

Sincerely,

Lynnette Koutnik

Lynnette Koutnik
Pre-Remedial Site Assessment Unit
Remedial Project Management Section
Bureau of Land

RECEIVED
MAR 17 1993
SITE ASSESSMENT SECTION